IN THE CLAIMS:

1. (original) An apparatus coupled to a first network interface, comprising:

a first network interface coupled to a network device on a first network in accordance with a first protocol;

a second network interface to be coupled to a network processor on a second network having a second protocol; and,

a processor coupled to the first network interface and the second network interface, said processor to translate said first protocol to said second protocol,

wherein said apparatus receives network transfers on behalf of the network processor while operating in a first mode, and initiates network transfers on behalf of the network processor while operating in a second mode.

2. (original) The apparatus of claim 1, wherein the apparatus is a protocol bridge, the first protocol is Fibre Channel and said network device is a Fibre Channel device.

3. (original) The apparatus of claim 2, wherein the second protocol is Small Computer System Interface (SCSI) and the second network is a packet-over-SONET (POS) network.

4. (original) The apparatus of claim 1, wherein said network processor is a storage processor and the second network is a POS network.

5. (original) The apparatus of claim 1, wherein said first mode is a target mode, said apparatus to perform at least one of a target mode read operation and a target mode write operation while in said target mode.

6. (original) The apparatus of claim 5, wherein said apparatus performs the target mode read operation by,

providing a command frame to the network processor over the second network interface in accordance with the second protocol,

receiving a data frame from the network processor that is sent in response to said command frame, and

transmitting, over the first network interface, a payload of the data frame to the network device in accordance with the first protocol.

7. (original) The apparatus of claim 6, wherein said apparatus performs said target mode operation by further,

receiving a status frame from the network processor that includes a response command,

transmitting said response command to the network device in accordance with the first protocol, and

transmitting an acknowledgement frame to the network processor in accordance with the second protocol indicating that the target read operation is complete.

8. (original) The apparatus of claim 5, wherein said apparatus performs the target mode write operation by,

providing a command frame to the network processor over the second network interface in accordance with the second protocol,

receiving a ready frame from the network processor that is sent in response to said command frame, said ready frame to contain a transfer command and to indicate that said network processor is ready to receive data, and

transmitting, over the first network interface, the transfer command to the network device in accordance with the first protocol.

9. (original) The apparatus of claim 8, wherein said apparatus performs the target mode write operation by further,

receiving, from the network device in accordance with the first protocol, a data frame sent in response to said transfer command,

terminating the first protocol of the data frame, and

transmitting the data frame to the network processor in accordance with the second protocol.

10. (original) The apparatus of claim 9, wherein said apparatus performs the target mode write operation by further

receiving a status frame from the network processor that includes a response command,

transmitting said response command to the network device in accordance with the first protocol, and

transmitting an acknowledgement frame to the network processor in accordance with the second protocol indicating that the target write operation is complete.

11. (original) The apparatus of claim 1, wherein said second mode is an initiator mode, said apparatus to perform at least one of an initiator mode read operation and an initiator mode write operation while in said initiator mode.

12. (original) The apparatus of claim 11, wherein said apparatus performs the initiator mode read operation by,

receiving a command frame from the network processor over the second network interface in accordance with the second protocol, said command frame to contain a data request command,

transmitting the data request command to the network device in accordance with the first protocol,

receiving, from the network device over the first network interface, a data frame in accordance with the first protocol, and

terminating said first protocol for said data frame.

13. (original) The apparatus of claim 12, wherein said apparatus performs said initiator mode read operation by further,

transmitting said data frame to the network processor in accordance with the second protocol,

receiving a response command from the network device in accordance with the first protocol, and

transmitting a status frame containing the response command to the network processor in accordance with the second protocol.

14. (original) The apparatus of claim 11, wherein said apparatus performs the initiator mode write operation by,

receiving a command frame containing a transfer command from the network processor over the second network interface in accordance with the second protocol,

transmitting the transfer command to the network device in accordance with the first protocol,

receiving a transfer ready command from the network device that is sent in response to said command, said transfer ready command to indicate that said network device is ready to receive data, and

transmitting, over the second network interface, a ready frame to the network processor in accordance with the second protocol, said ready frame to contain the transfer ready command.

15. (original) The apparatus of claim 14, wherein said apparatus performs the target mode write operation by further,

receiving, from the network processor in accordance with the second protocol, a data frame sent in response to said transfer ready command,

transmitting the data frame to the network device in accordance with the first protocol,

receiving a response command from the network device according to the first protocol, and

providing a status frame to the network processor containing the response command, said status frame to indicate that the initiator write operation is complete.

16. (original) The apparatus of claim 1, wherein said apparatus determines which of said target mode operation and initiator mode operation to perform based on one or more frame header fields.

17. (original) The apparatus of claim 16, wherein said one or more frame header fields includes a protocol field that is used to determine a frame type for frames received by said apparatus.

18. (original) The apparatus of claim 17, wherein said frame type is one of a target mode frame, initiator mode frame, raw frame, control mode frame and event reporting frame.

19. (original) The apparatus of claim 18, upon receiving a raw frame, enters a raw frame mode in which frames received over said first network interface according to said first protocol are encapsulated into a second protocol frame and sent to said network processor over the second network interface.

20. (original) The apparatus of claim 18, upon receiving a control mode frame, routes the control mode frame to a predetermined hardware queue that is different than a memory queue used for data frames, wherein said control mode frame to cause the apparatus to perform a control operation.

21. (original) The apparatus of claim 18, to communicate an asynchronous event to said network processor, provides an event reporting frame to said network processor over the second network interface.

22-47. canceled

47. (original) The method of claim 46, further comprising:

receiving, from the network processor in accordance with the first protocol, a data frame sent in response to said transfer ready command,

transmitting the data frame to the network device in accordance with the second protocol,

receiving a response command from the network device according to the second protocol, and

providing a status frame to the network processor containing the response command, said status frame to indicate that the initiator write operation is complete.

48. (original) An apparatus, comprising:

a first network interface to be coupled to a network device on a first network in accordance with a first protocol that is terminated by said apparatus;

a second network interface to be coupled to a network processor on a second network having a second protocol; and,

a processor coupled to the first network interface and the second network interface,

wherein said apparatus functions as a target for the network processor while performing a target mode operation, and functions as an initiator on behalf of the network processor while performing an initiator mode operation.

49. (original) The apparatus of claim 48, wherein said target mode operation is one of a target mode read operation and a target mode write operation.

50. (original) The apparatus of claim 49, wherein said apparatus performs the target mode read operation by,

providing a command frame to the network processor over the second network interface in accordance with the second protocol,

receiving a data frame from the network processor that is sent in response to said command frame, and

transmitting, over the first network interface, a payload of the data frame to the network device in accordance with the first protocol.

51. (original) The apparatus of claim 50, wherein said apparatus performs said target mode operation by further,

receiving a status frame from the network processor that includes a response command,

transmitting said response command to the network device in accordance with the first protocol, and

transmitting an acknowledgement frame to the network processor in accordance with the second protocol indicating that the target read operation is complete.

52. (original) The apparatus of claim 49, wherein said apparatus performs the target mode write operation by,

providing a command frame to the network processor over the second network interface in accordance with the second protocol

receiving a ready frame from the network processor that is sent in response to said command frame, said ready frame to contain a transfer command and to indicate that said network processor is ready to receive data, and

transmitting, over the first network interface, the transfer command to the network device in accordance with the first protocol.

53. (original) The apparatus of claim 52, wherein said apparatus performs the target mode write operation by further,

receiving, from the network device in accordance with the first protocol, a data frame sent in response to said transfer command,

terminating the first protocol of the data frame, and

transmitting the data frame to the network processor in accordance with the second protocol.

54. (original) The apparatus of claim 53, wherein said apparatus performs the target mode write operation by further

receiving a status frame from the network processor that includes a response command,

transmitting said response command to the network device in accordance with the first protocol, and

transmitting an acknowledgement frame to the network processor in accordance with the second protocol indicating that the target write operation is complete.

55. (original) The apparatus of claim 48, wherein said initiator mode operation is one of an initiator mode read operation and an initiator mode write operation.

56. (original) The apparatus of claim 55, wherein said apparatus performs the initiator mode read operation by,

receiving a command frame from the network processor over the second network interface in accordance with the second protocol, said command frame to contain a data request command,

transmitting the data request command to the network device in accordance with the first protocol,

receiving, from the network device over the first network interface, a data frame in accordance with the first protocol, and

terminating said first protocol for said data frame.

57. (original) The apparatus of claim 56, wherein said apparatus performs said initiator mode read operation by further,

transmitting said data frame to the network processor in accordance with the second protocol,

receiving a response command from the network device in accordance with the first protocol, and

transmitting a status frame containing the response command to the network processor in accordance with the second protocol.

58. (original) The apparatus of claim 55, wherein said apparatus performs the initiator mode write operation by,

receiving a command frame containing a transfer command from the network processor over the second network interface in accordance with the second protocol,

transmitting the transfer command to the network device in accordance with the first protocol,

receiving a transfer ready command from the network device that is sent in response to said command, said transfer ready command to indicate that said network device is ready to receive data, and

transmitting, over the second network interface, a ready frame to the network processor in accordance with the second protocol, said ready frame to contain the transfer ready command.

59. (original) The apparatus of claim 58, wherein said apparatus performs the target mode write operation by further,

receiving, from the network processor in accordance with the second protocol, a data frame sent in response to said transfer ready command,

transmitting the data frame to the network device in accordance with the first protocol,

receiving a response command from the network device according to the first protocol, and

providing a status frame to the network processor containing the response command, said status frame to indicate that the initiator write operation is complete.